REMARKS

This application contains claims 1 through 18. Claims 17 and 18 are newly added.

The present application was originally drafted in German, and then translated into English. In the present amendment, Applicants amended the claims to remove multiple dependencies, to conform to US drafting style, and to delete extraneous language. Applicants have not limited the scope of any term in any claim, and thus, Applicants respectfully submit that the doctrine of equivalents is available for all terms of all of the claims. Favorable consideration is respectfully urged.

Respectfully submitted,

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Date

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IN THE CLAIMS

1. (Amended) ~~Illumination~~ An illumination system~~, particularly~~ for lithography with wavelengths of ≤193 nm comprising:

~~1.1~~ a first optical element, which is divided into first raster elements and lies in a first plane, ~~whereby~~

wherein said first plane defines an x-direction and ~~an~~ a y-direction, ~~whereby~~

~~1.2 the images of the first raster elements superimpose in an object plane of the illumination system and~~

~~1.4 the~~wherein said first raster elements each have an x-direction and a y-direction with ~~a~~ an aspect ratio, and

~~characterized in that~~

~~1.5~~ wherein at least two of said first raster elements ~~each~~ have ~~a~~ aspect ~~ratio~~ ratios of different magnitude.

2. (Amended) The illumination ~~Illumination~~ system according to claim 1,

~~further characterized in that~~

~~the illumination system comprises~~ further comprising a second optical element, which is divided into second raster elements, ~~whereby~~

wherein a second raster element is assigned to a first raster element, and ~~whereby~~

wherein at least one second raster element has an anamorphotic optical effect.

3. (Amended) The illumination ~~Illumination~~ system according to claim 2,

~~further characterized in that~~wherein the illumination system defines

a field ~~with a field aspect ratio,~~

wherein said field is illuminated in ~~the~~ an object plane of the illumination system, and

wherein at least some of ~~the~~ said second raster elements have an anamorphotic optical effect, which is selected such that ~~the~~ an aspect ratio of ~~the~~ images of ~~the~~ said first raster elements is substantially the same in ~~the~~ said object plane, independent of ~~the~~ said aspect ratio of ~~the~~ said first raster elements.

4. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 3~~claim 1,

~~further characterized in that~~wherein

at least one of ~~the~~ said at least two first raster elements with aspect ratios of different magnitude has an anamorphotic optical effect.

5. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 3~~claim 1,

~~further characterized in that~~wherein

~~the~~ said at least two first raster elements with aspect ratios of different magnitude have an isotropic optical effect.

6. (Amended) The illumination ~~Illumination~~ system according to claim 5,

~~further characterized in that~~wherein

~~the~~ said first raster elements have an isotropic optical effect.

7. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 5~~claim 1,

~~further characterized in that~~wherein

~~those~~ said first raster elements that have an anamorphotic optical effect are of a shape selected from the group consisting of cylinders ~~and/or~~and toroids.

8. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 7~~claim 2,

~~further characterized in that~~wherein

~~those~~ said second raster elements that have an anamorphotic optical effect are of a shape selected from the group consisting of cylinders ~~and/or~~and toroids.

9. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 8~~claim 1,

~~further characterized in that~~wherein

all of ~~the~~ said first raster elements are completely illuminated in ~~the~~ said first plane.

10. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 9~~claim 1,

~~further characterized in that~~

~~the illumination system has~~further comprising a collector unit, which illuminates ~~the~~ said first plane with ~~the~~ said first raster elements.

11. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1 to 10~~claim 1,

~~further characterized in that~~

~~the illumination system has~~further comprising at least one field mirror.

12. (Amended) The illumination ~~Illumination~~ system according to claim ~~11~~2, further comprising at least one field mirror,

~~further characterized in that~~wherein

~~the~~ said second raster elements and ~~the~~ said at least one field mirror image ~~the~~ said assigned first raster elements in ~~the~~ an object plane of the illumination system.

13. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1-12~~claim 1,

~~further characterized in that~~wherein

~~the~~ said first raster elements are rectangular.

14. (Amended) The illumination ~~Illumination~~ system according to ~~one of claims 1-13~~claim 1,

~~further characterized in that~~wherein the illumination system defines

~~the~~ a field to be illuminated in ~~the~~ an object plane of the illumination system~~-~~, and wherein said field represents a segment of a ring field.

15. (Amended) ~~Projection~~ A projection exposure system for microlithography ~~with~~ , comprising:

~~15.1 a~~an illumination system according to ~~one of claims 1 to 14~~claim 1 with an exit pupil ~~(112)~~, which partially collects ~~the~~ an emission produced by a light source ~~(100)~~ and further guides it to illuminate a field in ~~the~~ an object plane of the ~~Illumination~~ illumination system;

~~15.2~~ a pattern-bearing mask, which lies in ~~the~~ said object plane ~~(114) of the Illumination system~~;

~~15.3~~ a projection device, ~~particularly a projection objective (126)~~ with an entrance pupil, which coincides with ~~the~~ an exit pupil ~~(112)~~ of the ~~Illumination~~ illumination system, ~~whereby this~~wherein said projection ~~objective~~ device images ~~the~~ a lighted portion of ~~the~~ said pattern-bearing mask in an image field of ~~the~~ said projection device; and

~~15.4~~ a light-sensitive substrate ~~(124)~~, which lies in ~~the~~ a plane of ~~the~~ said image field ~~of the projection device~~.

16. (Amended) ~~Method~~ A method for producing ~~microeletronic~~ microelectronic components, ~~particularly semiconductor chips with a~~comprising using the projection exposure system according to claim 15.

Claims 17 and 18 are newly added.